National Institute of Environmental Health Sciences

Climate change and older Americans: State of the science

Author(s): Gamble JL, Hurley BJ, Schultz PA, Jaglom WS, Krishnan N, Harris M
Year: 2013
Journal: Environmental Health Perspectives. 121 (1): 15-22

Abstract:

BACKGROUND: Older adults make up 13% of the U.S. population, but are projected to account for 20% by 2040. Coinciding with this demographic shift, the rate of climate change is accelerating, bringing rising temperatures; increased risk of floods, droughts, and wildfires; stronger tropical storms and hurricanes; rising sea levels; and other climate-related hazards. Older Americans are expected to be located in places that may be relatively more affected by climate change, including coastal zones and large metropolitan areas. OBJECTIVE: The objective of this review is to assess the vulnerability of older Americans to climate change and to identify opportunities for adaptation. METHODS: We performed an extensive literature survey and summarized key findings related to demographics; climate stressors relevant to older adults; factors contributing to exposure, sensitivity, and adaptive capacity; and adaptation strategies. DISCUSSION: A range of physiological and socioeconomic factors make older adults especially sensitive to and/or at risk for exposure to heat waves and other extreme weather events (e.g., hurricanes, floods, droughts), poor air quality, and infectious diseases. Climate change may increase the frequency or severity of these events. CONCLUSIONS: Older Americans are likely to be especially vulnerable to stressors associated with climate change. Although a growing body of evidence reports the adverse effects of heat on the health of older adults, research gaps remain for other climate-related risks. We need additional study of the vulnerability of older adults and the interplay of vulnerability, resilience, and adaptive responses to projected climate stressors.

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3553435

Resource Description

Early Warning System: ☑

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure : ☑

weather or climate related pathway by which climate change affects health

Air Pollution, Extreme Weather Event, Food/Water Quality, Food/Water Quality, Human Conflict/Displacement, Temperature

Air Pollution: Allergens, Dust, Interaction with Temperature, Ozone, Particulate Matter

Extreme Weather Event: Drought, Flooding, Hurricanes/Cyclones

Temperature: Extreme Heat

Geographic Feature:

resource focuses on specific type of geography

Ocean/Coastal, Urban

Geographic Location:

resource focuses on specific location

United States

Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Infectious Disease, Mental Health/Stress, Respiratory Effect

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly

Resource Type:

format or standard characteristic of resource

Review

Resilience:

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content